

NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

P-221

ISSUED: February 4, 1983

Forwarded to:

Honorable H. W. Jordan  
Mayor  
City of Pryor  
6 North Adair Street  
Pryor, Oklahoma 74361

SAFETY RECOMMENDATION(S)

P-83-6 and -7

At 10:00 a.m., c.s.t., on February 1, 1983, a natural gas explosion demolished a house, killed two persons, and injured three at 705 S.W. First Street in Pryor, Oklahoma. Natural gas, escaping from a hole within an extensive area of corrosion at and just below ground level, on a 1/2-inch bare and noncathodically protected steel gas line beneath the house, filled the enclosed crawl space beneath the house, migrated into the house, and was ignited by one of several available ignition sources. Before the explosion, the odor of gas had been detected around midnight by one of the residents, but the gas company was not advised. The owner of the house was advised about the possibility of a gas leak, and around 9:30 a.m., he detected the odor of gas but did not notify the gas company.

The Pryor Municipal Utility Board (gas company) distributes natural gas to its customers by providing a service line to residential property lines where the gas pressure is reduced from 15 psig to 8 ounces of pressure (about 1/4 psig). At this point, the gas company service line is connected to the residential service line. Typically, the residential service line is a bare, noncathodically protected steel pipe that is run underground to a point beneath a house where it exits the ground and is connected to piping for gas appliances. The gas company acknowledges no responsibility for the piping beyond facilities it owns, and consequently, periodic gas leak surveys or other tests are not performed to determine the condition of the residential piping, as is required by Federal regulations for gas company-owned piping. Also, protection against corrosion of the buried residential piping is not provided, as is required for gas company-owned piping.


Because numerous houses in Pryor, Oklahoma, are served with natural gas in a manner similar to that of the house which was destroyed, are of similar construction and age, and have buried gas service lines with a similar potential for undetected corrosion and because persons who detected the odor of gas before the explosion apparently did not know to advise the gas company, the National Transportation Safety Board recommends that the city of Pryor:

Immediately advise citizens to notify the gas company should they detect the odor of gas in a building and advise them regarding appropriate emergency procedures. Additionally, cause buried residential gas service lines to be inspected for corrosion damage and require the replacement of lines found to be hazardous. (Class I, Urgent Action) (P-83-6)

Develop a program to require periodic inspection of all buried residential service lines. (Class II, Priority Action) (P-83-7)

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility ". . .to promote transportation safety by conducting independent accident investigation and by formulating safety improvement recommendations." (P.L. 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendation(s). Therefore, we would appreciate a response from you regarding action taken or contemplated with respect to the recommendations in this letter.

BURNETT, Chairman, and BURSLEY and ENGEN, Members, concurred in these recommendations. GOLDMAN, Vice Chairman, and McADAMS, Member, did not participate.

  
By: Jim Burnett  
Chairman